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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/542,158

03/23/2006

Giora Erlich

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1459

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EXAMINER

DANIEL, JAMAL D

ART UNIT

PAPER NUMBER

3723

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DELIVERY MODE

01/05/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/542,158	<b>Applicant(s)</b> ERLICH ET AL.	
	<b>Examiner</b> JAMAL DANIEL	<b>Art Unit</b> 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 1-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/11/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of claims 18-24 in the reply filed on 9/16/2009 is acknowledged. The traversal is on the following ground(s):
  - a. A robotic pool cleaner inherently has a controller
  - b. Claim 2 recites "a rotational delay clutch co-axially positioned between each of the first and second pair of dual brushes", which claim 1 lacks
  - c. Groups I and II have several common features
2. This is not found persuasive for the following reasons:
  - a. While the Examiner agrees that a robotic pool cleaner must inherently have some form of a controller, a controller specifically for controlling the direction of rotation of the drive motor as claimed in group I is not inherent. For example, some robotic pool cleaners change direction by moving a valve from one position to another, but the drive motor maintains the same driving direction.
  - b. Unity of invention is considered only in relation to the independent claims (MPEP Annex B). Therefore, group I lacks the rotational delay clutch of group II.
  - c. The common features of groups I and II are anticipated by US Patent 6,299,699 B1. In order to qualify as special technical features, the common elements must define a contribution over the prior art. In other words, the common elements must be novel.

**The requirement is still deemed proper and is therefore made FINAL.**

***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the expandable member of claim 22, the orbital gear assembly of claim 23, and the electro-mechanical clutch engagement assembly and associated means for actuation must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

4. Claim 24 objected to because of the following informalities: Claim 24 is directed to the method of claim 18, but claim 18 is clearly an apparatus claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. **Claims 18 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over 6,299,699 B1 (Porat) in view of US Patent 4,786,334 (Nystrom).**

8. In re claim 18, Porat discloses the claimed invention except for a rotational delay clutch assembly co-axially positioned between each pair of brushes. However, Nystrom discloses a delay clutch assembly co-axially positioned between its wheels. Since the

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pool vacuum of Porat uses brushes as wheels, it would have been obvious to combine the delay clutch assembly of Nystrom between the brushes of Porat in order to eliminate the need for multiple motors individually controlling each side of the cleaner.

**9. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porat and Nystrom and in further view of US Patent 2,640,338 (Charvat).**

10. In re claims 19 and 20, Porat and Nystrom disclose the claimed invention as applied to claim 18. Charvat discloses a fixed pair of clutch plates as well as free intermediate plates. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the shaft coupling means as taught in Charvat, with the pool cleaner of Porat as a cheaper mechanical alternative for power transmission.

**11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Porat and Nystrom and in further view of US Patent 2,329,153 (Bromley).**

12. In re claim 21, Porat and Nystrom disclose the claimed invention as applied to claim 18. Bromley discloses coupling two shafts with a flexible member, thereby allowing a delay before synchronous engagement. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the shaft coupling means as taught in Bromley, with the pool cleaner of Porat as a cheaper mechanical alternative for power transmission.

**13. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Porat and Nystrom and in further view of US Patent 5,074,825 (Hamasaki).**

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14. In re claims 19 and 20, Porat and Nystrom disclose the claimed invention as applied to claim 18. Hamasaki discloses a hydraulic coupling apparatus. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the shaft coupling means as taught in Hamasaki, with the pool cleaner of Porat as a mechanical alternative for power transmission.

15. **Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Porat and Nystrom and in further view of US Patent 2,284,070 (Roof).**

16. In re claim 21, Porat and Nystrom disclose the claimed invention as applied to claim 18. Roof discloses coupling two shafts with an orbital gear assembly. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the shaft coupling means as taught in Roof, with the pool cleaner of Porat as a cheaper mechanical alternative for power transmission.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMAL DANIEL whose telephone number is (571)270-5706. The examiner can normally be reached on Monday - Friday 7:30 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (571)272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAMAL DANIEL/  
Examiner, Art Unit 3723

/Joseph J. Hail, III/  
Supervisory Patent Examiner, Art Unit 3723